

				ATTY DOCKET NO. 128954-3		SERIAL NO. 10/733,062	
				Guo et al.			
				FILING 12/11/2003		GROUP	
<b>U.S. PATENT DOCUMENTS</b>							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
/PS/	6,593,391	7/15/2003	Teutsch et al.				
	2001/0053820 A1	12/20/2001	Yeager et al.				
	2002/0120047	8/29/2002	Border et al.				
	2002/0120048	8/29/2002	Border et al.				
	2002/0169256 A1	11/14/2002	Merfeld et al.				
	2002/0173597 A1	11/21/2002	Zarnoch et al.				
	2002/0177027 A1	11/28/2002	Yeager et al.				
	2003/0096123 A1	5/22/2003	Yeager				
	2003/0215588 A1	11/20/2003	Yeager et al.				
↓	3,375,228	3/26/1968	Holoch et al.				
/PS/	4,148,843	4/10/1979	Goossens				
<b>FOREIGN PATENT DOCUMENTS</b>							
/PS/	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
	DE 31 17 514 A1	2.5.81	German			YES	NO
	DE 41 03 140 A1	2.2.91	German			✓	
	EP 0 261 574	13.11.91	European				✓
↓	WO 02/079301 A2	10.10.2002	PCT				✓
/PS/	WO 93/04117	04.03.93	PCT				✓
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
/PS/		Pugh et al. "Group Transfer Polymerization of Some Unusual Acrylates and Methacrylates", Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1985), 26 (2), 303-5					
/PS/		S. J. Monte et al., "A New Generation of Age and Water Resistant Reinforced Plastics", ANTEC, 1979, Section 16-E, pages 1-10					
EXAMINER			DATE CONSIDERED				
/Peter Szekely/			03/22/2007				
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<b>U.S. PATENT DOCUMENTS</b>								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
/PS/		4,528,235	7/9/1985	Sacks et al.				
		4,562,243	12/31/1985	Percec				
		4,618,528	10/21/1986	Sacks et al.				
		4,634,742	1/6/1987	Percec				
		4,663,402	5/5/1987	Percec et al.				
		4,665,137	5/12/1987	Percec				
		4,677,185	6/30/1987	Heitz et al.				
		4,701,514	10/20/1987	Percec				
		4,739,007	4/19/1988	Okada et al.				
V		4,760,118	7/26/1988	White et al.				
/PS/		4,806,601	2/21/1989	Percec				
<b>FOREIGN PATENT DOCUMENTS</b>								
/PS/		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
/PS/		WO 93/11190	10.06.93	PCT				✓
/PS/		WO 95/14733	01.06.95	PCT				✓
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>								
/PS/		L. B. Cohen, "Zirconium Oxides Strengthen Premium Ranges of Chemical Coupling Agents", <i>Plastics Engineering</i> , Vol. 39, No. 11, pages 29-32 (1983)						
/PS/		S. J. Monte et al., "Coupling Composites with Titanate During Extrusion Processing", <i>Modern Plastics</i> , May 1984, pages 74-78						
EXAMINER <b>/Peter Szekely/</b>				DATE CONSIDERED <b>03/22/2007</b>				
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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/PS/	4,810,734	3/7/1989	Kawasumi et al.			
	4,874,728	10/17/1989	Elliott et al.			
	4,889,885	12/26/1989	Usuki et al.			
	4,923,932	5/8/1990	Katayose et al.			
	5,071,922	12/10/1991	Nelissen et al.			
	5,079,268	1/7/1992	Nelissen et al.			
	5,091,480	2/25/1992	Percec			
	5,171,761	12/15/1992	Penco et al.			
	5,218,030	6/8/1993	Katayose et al.			
✓	5,219,951	6/15/1993	Nelissen et al.			
/PS/	5,304,600	4/19/1994	Nelissen et al.			

**FOREIGN PATENT DOCUMENTS**

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						YES	NO

**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, Etc.)*

/PS/		"Plastic Additives Handbook, 4th Edition" R. Gachter and H. Muller (eds.), P. P. Klemchuck (assoc. ed) Hansen Publishers, New York 1993, pages 914-935
/PS/		Chem. Mater. 1996, 8, 1584-1587, Shi et al., "Interfacial Effects on the Reinforcement Properties of Polymer-Organoclay Nanocomposites"

EXAMINER <b>/Peter Szekely/</b>	DATE CONSIDERED <b>03/22/2007</b>
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12/11/2003

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## **U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/PS/	5,310,820	5/10/1994	Nelissen et al.			
	5,338,796	8/16/1994	Vianello et al.			
	5,385,776	1/31/1995	Maxfield			
	5,407,972	4/18/1995	Smith et al.			
	5,552,469	9/3/1996	Beall et al.			
	5,578,672	11/26/1996	Beall et al.			
	5,698,624	12/16/1997	Beall et al.			
	5,760,121	6/2/1998	Beall et al.			
	5,834,565	11/10/1998	Tracy et al.			
✓	5,877,248	3/2/1999	Beall et al.			
/PS/	5,965,663	10/12/1999	Hayase			

## **FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## **OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

/PS/	Chem. Mater. 1994, 6, 468-474, Wang et al., "Clay-Polymer Nanocomposites Formed from Acidic Derivatives of Montmorillonite and an Epoxy Resin"
/PS/	Chem. Mater. 1994, 6, 1719-1725, Messersmith et al., "Synthesis and Characterization of Layered Silicate-Epoxy Nanocomposites"

EXAMINER  
/Peter Szekely/

DATE CONSIDERED  
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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/PS/		6,051,662	4/18/2000	Tracy et al.			
		6,228,903	5/8/2001	Beall et al.			
		6,251,308	6/26/2001	Butler			
		6,287,992	9/11/2001	Polansky et al.			
		6,306,963	10/23/2001	Lane et al.			
		6,352,782	3/5/2002	Yeager et al.			
		6,384,176	5/7/2002	Braat et al.			
		6,469,124	10/22/2002	Braat et al.			
		H 521	9/6/1988	Fan			
↓		6,521,703	2/18/2003	Zarnoch et al.			
/PS/		6,617,398 B2	9/9/2003	Yeager et al.			

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, Etc.)*

/PS/		Chem. Mater. 1995, 7, 2144-2150, Lan et al., "Mechanism of Clay Tactoid Exfoliation in Epoxy-Clay Nanocomposites"
/PS/		Reichle et al., "Catalytic Reactions by Thermally Activated, Synthetic, Anionic Clay Materials", Journal of Catalysis 94, 547-557 (1985)

EXAMINER <b>/Peter Szekely/</b>	DATE CONSIDERED <b>03/22/2007</b>
------------------------------------	--------------------------------------

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Docket Number (Optional)

128954-3

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Applicant(s)

Guo et al.

Filing Date

12/11/2003

Group Art Unit

\*EXAMINER  
INITIAL**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, Etc.)*

/PS/

"Interfacial Properties of POSS-Nanofillers," J. Polidan et al., American Physical Society March 2002 Meeting, Session M33, Poster Session IV (<http://www.eps.org/aps/meet/MAR02/baps/abs/S4735035.html>)

/PS/

Callaghan et al., "Interaction Energies for Blends of Poly(methyl methacrylate), Polystyrene, and Poly ( $\alpha$ -methylstyrene) by the Critical Molecular Weight Method", *Macromolecules* 1993, 26, 2439-2450

/PS/

Isaac C. Sanchez, "Relationships Between Polymer Interaction Parameters", *Polymer*, 1989, Vol 30, March, 471-475

EXAMINER

/Peter Szekely/

DATE CONSIDERED

03/22/2007

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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/PS/		6,627,704 B2	9/30/2003	Yeager et al.			
/PS/		6,627,708	9/30/2003	Braat et al.			
/PS/		6,645,569	11/11/2003	Cramer et al.			
/PS/		6,646,302	11/11/2003	Kan et al.			
/PS/		6,652,967	11/25/2003	Yadav et al.			

**FOREIGN PATENT DOCUMENTS**

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)


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